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10/679,293	10/07/2003	Byung-Hoon Oh	1293.1862	4006

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EXAMINER

BUTLER, DENNIS

ART UNIT PAPER NUMBER

2115

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,293

Applicant(s)

OH ET AL.

Examiner

Dennis M. Butler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/7/03; 11/22/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. This action is in response to the application filed on October 7, 2003. Claims 1-22 are pending.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-22 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-15 of U.S. Patent No. 5,961,647. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to substantially the same invention including a computer that outputs a signal via a signal cable to a monitor, the signal indicating whether the computer is powered on or off and switching circuitry in the monitor powering the monitor on and off according to the signal. The independent claims of the present application are related as genus of the species recited in the patented claims and fully encompass the patented claims. Therefore, the genus is obvious over the species. The

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dependent claims of the present application substantially correspond to the elements recited in the patented claims.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-2 and 7-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al., U. S. Patent 5,961,647.

Per claims 1, 13, 16 and 20:

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A) Kim et al teach the following claimed items:

1. a computer (computer 100) outputting a predetermined signal indicating whether the computer is powered on or off with the signal output from 1st Power Supply 120 to MICOM in figure 4 and at column 8, lines 39-44 and 51-54;
2. a monitor (display 200) receiving the predetermined signal and powering on and off according to the predetermined signal with figure 4 and at column 8, lines 23-44 and 51-54.

Per claims 2, 14, 17 and 19:

Kim describes a video card processing and transmitting video signals to the monitor with video card 130 of figure 5 and at column 5, lines 24-29 and 36-40.

Kim describes outputting the predetermined signal from a predetermined pin of the video card or the transmission line with the power supply control signal pin in cable 300 and the corresponding pin in video card 130, with figure 5, at column 9, lines 17-30 and at column 5, lines 36-40. Kim describes transmitting the predetermined signal to the monitor whether the monitor is powered on or off at column 8, lines 39-44 and 51-54.

Per claims 7, 15 and 18:

Kim describes transmitting the predetermined signal to the monitor via a serial cable with the serial cable running from 1st Power Supply 120 to MICOM in figure 4. Kim describes detecting the level of the predetermined signal, supplying power to the monitor when the level is higher than a reference level and cutting off power when the level is lower than the reference level with the threshold voltage

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level of switching transistor Q1 of figure 4 and at column 8, line 58 – column 9, line 16. Kim describes powering off the monitor when the predetermined signal is not received due to the computer being in a DPMS mode or a power off mode at column 8, lines 51-54, at column 9, lines 8-16 and at column 10, lines 47-65.

Per claim 8:

A) Kim et al teach the following claimed items:

1. a computer (computer 100) outputting a predetermined signal, in addition to data signals (cable 300), indicating whether the computer is powered on or off with the signal output from 1st Power Supply 120 to MICOM in figure 4, at column 5, lines 24-29 and 36-40 and at column 8, lines 39-44 and 51-54;
2. a monitor (display 200) receiving the predetermined signal and powering on and off according to the predetermined signal with figure 4 and at column 8, lines 23-44 and 51-54.

Per claims 9-12:

Kim describes outputting the predetermined signal from a predetermined pin of the transmission line with the power supply control signal pin in cable 300, with figure 5, at column 9, lines 17-30 and at column 5, lines 36-40. Kim describes powering off the monitor when the predetermined signal is not received due to the computer being in a DPMS mode or a power off mode at column 8, lines 51-54, at column 9, lines 8-16 and at column 10, lines 47-65. Kim describes transmitting the predetermined signal to the monitor whether the monitor is powered on or off at column 8, lines 39-44 and 51-54. Kim describes a control

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unit (MICOM), a power unit (the relay) and one or more switches (Q1) where the control unit outputs a control signal to the switch to control a power supply (2nd Power Supply) from the power unit in response to the predetermined signal with figure 4, at column 8, lines 39-44 and at column 8, line 51 – column 9, line 16.

Per claim 21:

A) Kim et al teach the following claimed items:

1. a control unit connected to a computer (computer 100) by a serial cable (the serial cable running from 1st Power Supply 120 to MICOM) with MICOM and switching circuit 250 of figure 4 and at column 8, line 23 – column 9, line 16;
2. the monitor (display 200) being powered on and off according to a predetermined signal (the signal output from 1st Power Supply 120 to MICOM) from the computer indicating whether the computer is powered on or off with figure 4 and at column 8, lines 23-44 and 51-54.

Per claim 22:

Kim describes a power supply unit that is controlled by the control unit to supply or stop the supply of power to the monitor with 2nd Power Supply 240 of figure 4 and at column 8, line 51 – column 9, line 16.

8. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., U. S. Patent 5,961,647 in view of Chaiken et al., U. S. Patent 6,223,283.

Per claims 3 and 4:

A) Kim et al teach the following claimed items:

1. a control unit comparing a reference level (the threshold voltage level of switching transistor Q1) with a level of the predetermined signal, detecting a state of the computer based on the comparison and outputting a monitor power control signal with MICOM and switching circuit 250 of figure 4 and at column 8, line 23 – column 9, line 16;

2. a power supply unit that is controlled by the control unit to supply or stop the supply of power to the monitor with 2nd Power Supply 240 of figure 4 and at column 8, line 51 – column 9, line 16.

B) The claims differ from Kim et al in that Kim et al fails to explicitly teach the monitor including a memory storing monitor information wherein the information is provided to the computer whether the monitor is powered on or off as claimed.

C) However, Kim describes providing a 5 volt power signal from the computer to the MICOM and switching circuit 250 whether the monitor is powered on or off with figure 4. Therefore, Kim discloses providing a power source to circuit components in the monitor whether the monitor is powered on or off. Chaiken teaches that it is known to provide a monitor with a memory storing monitor information with figure 2 and at column 1, lines 45-59. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a monitor with a memory storing monitor information, as taught by Chaiken, in order to provide the computer and BIOS with monitor information for initializing the computer. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to power the memory

from the 5 volt power signal of Kim in order to provide power to the memory whether the monitor is powered on or off because this would allow the monitor to remain off during computer initialization thereby reducing the power consumed by the monitor. Furthermore, it is well known in the art that microcomputers such as MICOM in display 200 typically include read only memory and it would have been obvious to one of ordinary skill in the art to use the MICOMs ROM for storing Chaiken's EDID file. One of ordinary skill in the art would have been motivated to combine Kim and Chaiken because of Chaiken's description that it is well known that monitors include a ROM for storing EDID files having monitor information and that it is conventional for the BIOS to read/download the EDID file in a monitors ROM during initialization at column 1, lines 45-59.

Per claims 5 and 6:

Kim describes detecting the level of the predetermined signal, supplying power to the monitor when the level is higher than a reference level and cutting off power when the level is lower than the reference level with the threshold voltage level of switching transistor Q1 of figure 4 and at column 8, line 58 – column 9, line 16. Kim describes that the predetermined signal is 5V for powering on and 0V for powering off at column 10, lines 18-53.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis M. Butler whose telephone number is 571-272-3663. The fax number for this unit is 571-273-3663.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dennis M. Butler
Dennis M. Butler
Primary Examiner
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